

OIL AND GAS CONSERVATION DIVISION



PHOTO BY GARY KLOTZ

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Prevent waste and provide for the conservation of crude oil and natural gas through regulation of exploration and production.

The quasi-judicial Board of Oil and Gas Conservation (BOGC) and its technical and administrative staff in the Oil and Gas Conservation Division are attached to the Department of Natural Resources and Conservation for administrative purposes. The board consists of seven members appointed to four-year terms by the governor. Members of BOGC during 2003 were:

David Ballard, Chair Billings Petroleum Geologist and Geophysicist	
Denzil Young, Vice Chair Baker Attorney	Allen Kolstad Ledger Farmer
Jerry Kennedy Shelby Oil Producer	Elaine Mitchell Cut Bank Accountant
Jack King Billings Landman	Gary Willis Helena Governmental Affairs Representative

The board's primary responsibilities are conservation of resources and prevention of waste through regulation of oil and gas exploration and production. In regulating these activities, the board relies heavily on its Oil and Gas Conservation Division staff. The division is headquartered in Billings, with field inspectors in Glendive, Plentywood, Roundup, and Shelby, and an administrative office in Helena. The board has a website at:

www.bogc.dnrc.state.mt.us

The board's regulatory actions have four primary goals:

- Prevention of waste of oil and gas reserves
- Conservation of oil and gas through encouragement of maximum efficient recovery of those resources
- Protection of the correlative rights of the mineral owners, i.e., the right of each owner to recover its fair share of the oil and gas underlying its lands
- Prevention of harm to nearby surface or underground resources from oil and gas operations

It accomplishes these goals by issuing orders and deficiency reports, adopting rules, establishing spacing units, classifying wells, issuing drilling permits, and administering bonds (required to guarantee the eventual proper plugging of wells and surface restoration). BOGC also plugs and restores the surface of orphaned, abandoned,

and problem wells, and it is empowered to levy both civil and criminal fines. It maintains a library of well cutting samples and core samples in Billings. Since 1993, the board has certified companies to receive tax incentives for horizontal wells and enhanced recovery projects.

The Oil and Gas Conservation Division is supported from three main sources:

- Privilege and license tax (0.26 percent of the market value of crude petroleum and natural gas produced, saved, and marketed or stored within the state or exported from the state [less government royalties])
- An annual injection well fee
- Federal grant funds for the Underground Injection Control (UIC) Program

The Underground Injection Control Program

BOGC has been administering the UIC Program in Montana since 1996, when primacy for the program was obtained from the U. S. Environmental Protection Agency (EPA).

The objective of the UIC Program is to protect underground sources of drinking water from contamination that could result from the improper disposal of liquid oil-field wastes. Operators apply for a UIC permit through the public notice and hearing process by notifying either the Billings or the Helena Oil and Gas Conservation Office.

BOGC's jurisdiction applies to all but Indian lands. Program costs are covered by an annual operating fee of \$200 per injection well and an EPA operating grant of approximately \$105,000 per year.

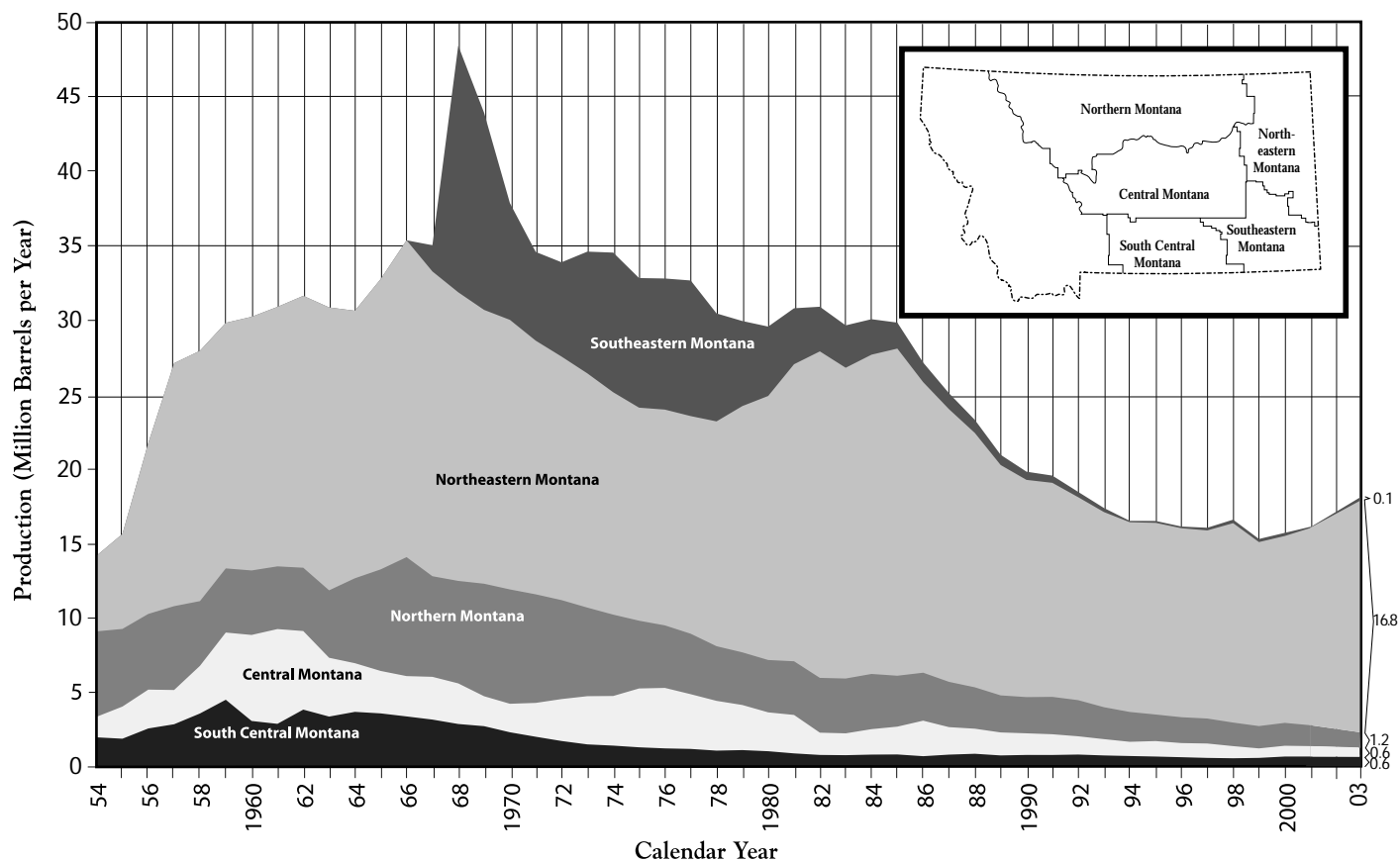
The UIC Program regulates 870 injection wells. In 2003, UIC field inspectors performed 518 inspections of these wells. Most of these inspections were routine, periodic inspections (183) and the witnessing of mechanical integrity tests (217).

In 2003, there were 72 injection well violations, of which 61 were failure to maintain mechanical integrity. This number of violations is higher than the 57 violations in 2002.

Activity Review

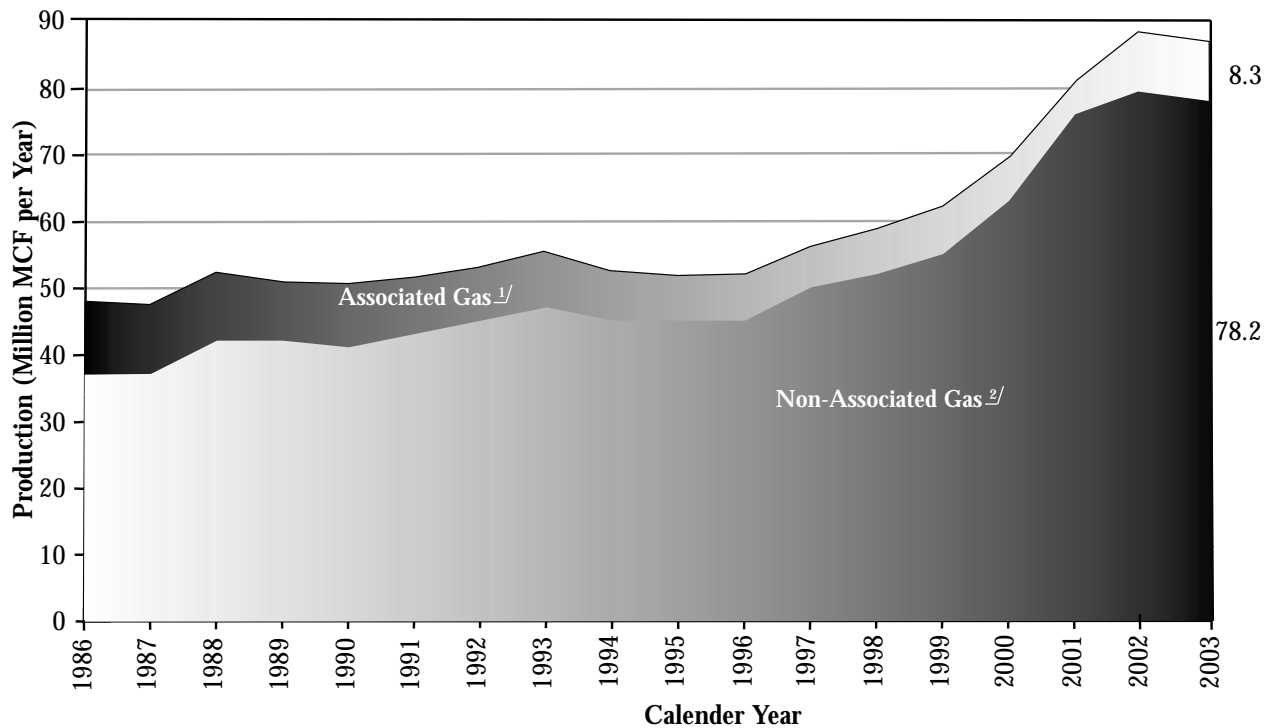
Montana's oil production increased by 13.9 percent, from 16.98 million barrels in 2002 to 19.34 million barrels in 2003. Crude oil production since 1954 is illustrated in Figure 14.

Figure 14
Crude Oil Production in Montana
1954-2003



Total gas production decreased from 86.9 million MCF in 2002 to 86.5 million MCF in 2003. Figure 15 on page 66 shows gas production from 1986 to 2003.

Figure 15
Natural Gas Production in Montana
1986-2003



1. Associated gas is gas that comes from an oil well.
2. Non-associated gas is gas that comes from a gas well.

Well drilling increased from 462 wells completed in 2002 to 645 in 2003. Figure 16 shows the wells permitted by region, while Table 20 presents the well information by county. There were 287 gas wells, 188 coal bed methane wells, and 97 new oil wells completed during 2003. Table 21 details permits, completions, and oil and gas production history from 1999 through 2003.

Figure 16
Wells Permitted in 2003 by Region
(834 Wells Permitted)

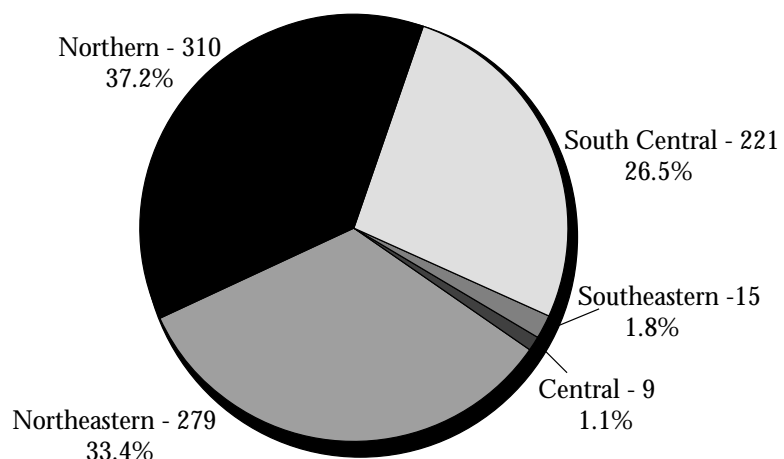


Table 20
Summary of 2003 Production and Drilling by County

County	PRODUCTION			WELL COMPLETIONS				
	Oil ¹ (Barrels)	Associated Gas (Thousand Cubic Feet, or MCF)	Gas (Thousand Cubic Feet, or MCF)	Oil	Gas	Coal Bed Methane	Dry	Other
Big Horn	68,137	0	7,229,945	0	0	188	0	0
Blaine	180,018	0	14,406,065	1	47	0	13	0
Carbon	503,257	514,405	1,003,387	1	0	0	0	0
Carter	0	0	0	0	3	0	1	0
Chouteau	0	0	2,447,423	0	12	0	7	0
Custer	0	0	182,632	0	1	0	0	0
Daniels	2,968	39	0	0	0	0	1	0
Dawson	554,733	210,756	0	1	0	0	0	2
Fallon	6,840,721	1,740,740	13,607,526	31	82	0	0	3
Fergus	0	0	22,641	0	0	0	0	0
Garfield	23,796	1,402	0	0	0	0	0	0
Glacier	520,389	98,319	1,829,514	0	1	0	2	0
Golden Valley	0	0	178,717	0	0	0	0	0
Hill	852	0	12,679,951	0	78	0	19	0
Liberty	98,073	26,250	2,206,049	0	6	0	1	0
McCone	9,392	0	0	0	0	0	1	0
Musselshell	187,629	16,747	0	2	0	0	0	1
Petroleum	33,807	3,300	0	0	0	0	1	0
Phillips	0	0	15,818,411	0	37	0	0	0
Pondera	129,465	0	235,648	0	1	0	0	0
Powder River	141,033	23,043	104,609	0	0	0	0	0
Prairie	186,693	22,194	1,683	0	0	0	0	1
Richland	5,284,378	3,628,845	256	42	0	0	2	0
Roosevelt	1,410,188	761,503	0	4	0	0	2	0
Rosebud	329,866	23,056	0	0	8	0	2	0
Sheridan	1,537,123	928,121	9,789	5	0	0	2	0
Stillwater	26	0	186,563	0	0	0	0	0
Sweet Grass	0	0	72,615	0	0	0	0	0
Teton	52,062	0	11,054	0	0	0	0	0
Toole	270,953	76,827	4,280,293	4	11	0	3	5
Valley	190,019	51,465	1,095,095	2	0	0	3	0
Wibaux	771,761	174,486	569,393	4	0	0	0	0
Yellowstone	18,859	0	0	0	0	0	1	0
TOTALS	19,346,198	8,301,498	78,179,259	97	287	188	61	12

1. Total oil production shown on Table 21 is greater than the total shown on Table 22, because Table 21 includes condensate or other reported natural gas liquids.

Table 21
Five-Year Summary of Drilling and Production in Montana

	1999	2000	2001	2002	2003
Wells Permitted					
Oil	79	131	127	142	213
Gas	329	344	468	453	399
Coal Bed Methane	156	113	81	13	218
Service	3	14	16	2	4
TOTALS	567	602	692	610	834
Wells Completed					
Oil	27	60	94	58	97
Gas	235	287	295	312	287
Coal Bed Methane	111	77	48	8	188
Dry	63	57	82	71	61
Service	23	9	20	13	12
TOTALS	459	490	539	462	645
Oil Production (Barrels)¹					
Northern	1,511,263	1,555,552	1,429,196	1,312,421	1,248,120
Northeastern	12,373,436	12,559,879	13,371,388	14,275,395	16,787,242
Central	638,239	725,437	650,982	630,368	590,193
South Central	606,812	696,340	656,160	603,383	572,145
Southeastern	208,707	213,671	173,567	157,118	141,033
TOTALS	15,338,457	15,750,879	16,281,293	16,978,685	19,338,733
Number of Producing Oil Wells					
Northern	1,854	1,891	1,845	1,756	1,757
Northeastern	1,265	1,305	1,344	1,393	1,430
Central	225	229	220	215	222
South Central	118	125	131	130	128
Southeastern	72	77	62	57	52
TOTALS	3,534	3,627	3,602	3,551	3,589
Non-Associated Gas Production (MCF)					
Northern	47,271,980	52,335,691	57,102,389	56,256,217	55,009,503
Northeastern	6,608,395	7,209,798	8,287,408	11,514,824	14,188,647
Central	119,271	91,836	92,185	244,407	201,358
South Central	1,158,942	4,804,418	9,300,792	11,103,921	8,492,510
Southeastern	448,519	391,012	384,830	314,136	287,241
TOTALS	55,607,107	64,832,755	75,167,604	79,433,505	78,179,259
Number of Producing Gas Wells					
Northern	3,386	3,537	3,687	3,823	3,929
Northeastern	245	295	344	412	489
Central	9	8	8	7	6
South Central	142	205	280	292	378
Southeastern	8	8	8	7	7
TOTALS	3,790	4,053	4,327	4,541	4,809

1. Production figures do not include condensate or other natural gas liquids.

The 2003 activities reflect increased drilling for oil and continued natural gas exploration and production. Development drilling in Fallon County and horizontal Bakken Formation wells in Richland County comprised the majority of oil well permits issued during the year.

During 2003, four geophysical contractors received permits for 35 seismic projects. The Williston Basin in northeastern Montana and the Blaine and Hill County areas had most of these projects.

During 2003, approval was given for 183 new horizontal wells and 53 horizontal recompletions of existing vertical wells. BOGC approved three coal bed methane development plans, and 19 horizontal recompletions were certified for tax purposes.

Drilling permit activity increased, with 610 permits to drill issued in 2002 and 834 permits issued in 2003. BOGC's staff performed environmental assessments for each application involving private or state-owned land prior to permit issuance.

BOGC issued 354 orders during the year. Most of these orders authorized increased well density to accommodate in-fill drilling programs, established permanent spacing for horizontal wells and exception wells, delineated new fields, and allowed exceptions to existing field rules.

In 2003, BOGC spent \$492,021 plugging orphaned and abandoned wells using grants from DNRC's Reclamation and Development Grants Program, interest allocated to the board from the Resource Indemnity Tax (RIT) Trust, and proceeds from forfeited plugging and restoration bonds.

